UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
WATER

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MEMORANDUM

SUBJECT: FY 2001 Clean Water Act Section 106 Grant Guidance

FROM: Michael B. Cook, Director
Office of Wastewater Management

TO: Regional Water Division Directors, Regions I-X

This memorandum provides guidance to the Environmental Protection Agency (EPA) Regions, States, territories, interstate agencies, and the general public. It does not create any legally binding requirements and does not change or substitute for EPA's statutes and regulations.

For FY 2001, Congress initially appropriated $170,262,300[1] for the Clean Water Act Section 106 water pollution control grants to States, territories, interstate agencies, and Indian tribes for administering programs for the prevention, reduction, and elimination of water pollution including water quality planning and monitoring activities and implementing an existing Total Maximum Daily Load (TMDL) program. The Section 106 appropriation has since been reduced by the Congressionally mandated rescission of 0.22 percent (for a total reduction of $374,600). The remaining total FY 2001 Section 106 funds available for States, territories, interstates, and eligible Indian tribes qualified under Clean Water Act Section 518(e) is $169,887,700.

These funds were allocated according to the existing Section 106 State and interstate allocation formula set forth at 40 CFR 35.252 and the Section 106 Tribal set-aside allocation

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[1]An additional $2,000,000 was appropriated for grants to coastal States (as provided in Senate Report 106-410) to establish monitoring and notification programs for detecting pathogens in coastal recreation waters under section 406 of the Clean Water Act, as amended by the Beach Environmental Assessment and Coastal Health Act (Pub. L 106-284).

allocation formula set forth at 40 CFR 35.252 and the Section 106 Tribal set-aside allocation formula. The Section 106 grant funds are currently available in the EPA Regions for award. In making the FY 2001 Section 106 funds available to the States, the Regions are required to ensure that States satisfy two requirements. The details of these two requirements are addressed below. In addition, the Regions may, at a State's request, provide contractor support services in the form of in-kind assistance as part of the grant award. The details and procedures for applying this option also are addressed below.

In Appendix A to this memorandum, we have included a summary of the FY 2001 Section 106 programmatic funding priorities. The Appendix is intended to provide a comprehensive overview of the programmatic priorities the Regions should consider when negotiating grant work plans supported by FY 2001 Section 106 grant funds.

On December 26, 2001, a draft of this document was circulated to the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) for review and comment. This guidance memorandum reflects comments received from ASIWPCA in which the Association expressed two primary concerns: (1) the withholding of the FY 2001 increase in Section 106 funding, and (2) use restrictions. In response, EPA has made the full FY 2001 Section 106 grant funding available for award, and the funds are not restricted to TMDL or other programmatic priorities identified in Appendix A to this memorandum.

A. TMDL Grant Conditions for FY 2001 Section 106 Funding.

The full state allotments of Section 106 funds are available for award by the Regions. However, there are States for which there are court orders (including consent decrees) and settlement agreements that could trigger a requirement for EPA to establish TMDLs in FY 2001 and beyond if a State fails to do so. In court orders (including consent decrees), EPA generally has commitments to perform specific activities, including establishing TMDLs, if a State fails to do so. In the associated memoranda of understanding (MOUs), States for which court orders (including consent decrees) exist make commitments to establish TMDLs.

In order to assure that the States for which court orders (including consent decrees) and settlement agreements exist meet their TMDL commitments, EPA Regions should have a Regionally approved State TMDL plan for each of those states which includes all the items mentioned below and a grant condition or specific deliverable in the grant work plan for the implementation of the plan. In those States, that do not have an approved plan, the Regions should require either as a specific deliverable of the grant work plan; or as a specific condition of any grant award or grant amendment which includes Section 106 funding that these States will (1) develop a plan and implementation schedule, within 60 days of the grant award, that shows how the State will meet their TMDL commitments under the MOUs, including milestones for completing TMDLs, and (2) implement that plan. The condition or work plan deliverable

should specify that the plan identify how available resources (including Section 106 funds, other EPA grant funds available for the establishment of TMDLs and State funds) will be used to meet these commitments. The plan should indicate: (1) how the TMDLs will be completed, (2) who will do the work necessary to establish the TMDLs, (3) what resources will be used, and (4) a schedule for the grant period showing which TMDLs are expected to be completed. The grant condition or work plan deliverable will provide that the plan be agreed upon by the Region and the State; it will not be subject to review in EPA Headquarters. Existing plans and documents should be used to the greatest extent. EPA believes that existing performance partnership agreements, memoranda of understanding, grant work plans, existing TMDL resource strategies, or plans adopted by States in response to State legislation can, in most cases, be readily modified to satisfy the requirement to develop a plan that shows how TMDL commitments will be met. If States fail to comply with the terms of these conditions or fail to provide the deliverable, EPA may exercise its regulatory authority under 40 CFR 31.43, and take other appropriate action.

In those States in which there are no court orders (including consent decrees) or settlement agreements, EPA Regions should ensure that an acceptable plan and implementation schedule is included as a specific deliverable in the grant work plan for establishing TMDLs for the grant period and that the plan is implemented.

B. Continuing Clean Water Act Section 106(e) Eligibility Requirements

Section 106(e) of the CWA provides that EPA shall not make any Section 106 grant to any State which..."is not carrying out as a part of its program -- (1) the establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, and to compile and analyze data on (including classification according to eutrophic condition), the quality of navigable waters and to the extent practicable, ground waters including biological monitoring; and provision for annually updating such data and including it in the report required under section 305 of this Act." As stated in the September 14, 1998, and July 27, 2000 memoranda from the Assistant Administrator for Water to the Regional Administrators, it is Agency policy that for FY 2000 and beyond, EPA will not award any Section 106 funding under a Section 106 grant or a PPG to any State which has not annually updated its monitoring data as required by section 106(e) and submitted the most recent report required under CWA 305(b) report.

Beginning with FY 2001, and in all fiscal years thereafter, all grants (including PPGs) to States and territories which include Section 106 grant funds should either (1) be conditioned to require the State or territory to provide EPA with an annual electronic update of the monitoring data required under Section (e) or (2) contain a specific deliverable for the electronic submission of the update no later than April 1st.

Annual updates to the STORage and RETrieval (STORET) national warehouse satisfies the conditions of the 106(e)(1) annual update for purposes of receiving section 106 grant funds. EPA requests that the annual update be provided to EPA electronically because of the predominance of electronic data management systems and because EPA has made such systems available free of charge to States, Territories, interstate agencies, Indian tribes and other organizations. EPA prefers that monitoring data be entered directly into the State's locally operated copy of STORET and transmitted annually to the national STORET date warehouse. In some limited situations EPA may determine that an alternate data submission satisfies the statutory requirement for an annual update. EPA and the State should identify and discuss these situations before the Section 106 funds are awarded to be sure that updates not transmitted directly to the national STORET data warehouse satisfy the annual electronic update requirement. The grant condition or specific work plan deliverable may identify the alternate means for the data submission agreed to by EPA and the recipient.

In 2002, and for all even numbered fiscal years thereafter (i.e., 2004, 2006), all grants (including PPGs) to States and territories which include Section 106 funds should either contain a specific work plan deliverable or be conditioned to require the State or territory to provide the final Section 305(b) electronic database and narrative report to demonstrate compliance with CWA Section 106(e) not later than April 1 of the respective even numbered year, as required by CWA Section 305(b)**.**

EPA has relied on submission of the 305(b) report and annual data updates to determine that States have satisfied the Section 106(e) requirement for State water quality monitoring programs. In the future, Regions will also conduct evaluations of State monitoring programs and work with States to strengthen these programs over time. EPA Regions and Headquarters are working on guidance that further defines the elements of a State monitoring program. This guidance will be available during FY 01 and is intended to facilitate continued work among States and EPA to develop strategies and time lines for improving State monitoring and assessment programs.

C. EPA/State Funding Tool

Non-Monetary Support (i.e. In-Kind-Assistance) in lieu of CWA Section 106 Federal Funds.

In addition to transferring money to an authorized assistance recipient, EPA offices and laboratories may use assistance agreements to transfer anything of value; such as equipment or EPA contractor services, to a recipient. According to EPA Order 5700.1 at p. 12 (copy attached) in-kind assistance is defined as non-monetary support. Thus, at the State's request, if it is more efficient for EPA, rather than the recipient to provide the services, EPA may procure the services of a contractor to perform programmatic activities which would be eligible for funding under a

Section 106 grant. In-kind assistance may only be used for activities that are eligible for funding under the grant and allowable under the applicable OMB cost circular (A-87). The contractor services may be provided to the State or territory as in-kind services in lieu of Federal Section 106 funds under either a categorical Section 106 grant or a performance partnership grant (PPG). EPA Order 5700.1 specifies that program offices should **document** the **savings of cost or time** that are expected as a result of providing in-kind assistance and notes that all charges are to the grants object class series. Examples of in-kind assistance are:

1. Transfer of equipment.
2. Use of EPA contractor services.
   EPA contractor support services could be used to support such water quality management activities (eligible for funding under Section 106 of the CWA) as the development of National Pollutant Discharge Elimination System (NPDES) permits and Total Maximum Daily Loads (TMDLs), water quality monitoring support, as well as other types of water quality protection support.

   If the recipient initiates a request for in-kind assistance, the recipient should:

   - Provide a written request for in-kind assistance. This can be done either in the grant application or, if the activity is already contained in the grant application, in a separate letter to the EPA Grant Project Officer. The request should also include a rationale as to why EPA, instead of the recipient should procure/provide this support.

   - Include the value of the in-kind assistance in the total grant application budget.

     Note: In using and disposing of equipment and supplies furnished on an in-kind basis, the recipient is also responsible for complying with the property standards contained in 40 CFR Part 30 and Part 31. These standards include record keeping requirements.

   The EPA Grant Project Officer should be familiar with the requirements and procedures for providing in-kind assistance under an assistance agreement, and be prepared to discuss this as a possible option available to the recipient. If EPA and the recipient determine it would be both appropriate and more efficient for EPA to provide equipment or services under in-kind assistance, in lieu of Federal grant funds, the recipient must modify/amend the grant work plan and application to include the in-kind assistance and account for its value.

   Pursuant to EPA Order 5700.1¶ 9, for in-kind assistance, the EPA Grant Project

Officer is responsible for ensuring that:

- The assistance file or decision memo contains an explanation of the expected savings of cost or time. Sample documentation follows:

  EPA will procure services under EPA's procurement contract for technical services with (Name of Contractor) for (Name of State) and provide the services as in-kind assistance under this grant. The services will assist the State in (developing National Pollutant Discharge Elimination System (NPDES) permits.) The State is expected to meet their commitment for (decreasing the State's permit backlog) by (Date). The use of this EPA contract will save time and money as compared to the State's conducting its own procurement.

- All charges are to the assistance object class series.

  Note: In providing in-kind assistance, EPA can use only those funds that are available for the grant in which the in-kind assistance is included. For example, for in-kind assistance provided under a section 106 grants to States, EPA must use the section 106 funds in the STAG account to procure the services or equipment.

- Once ***in-kind assistance*** has been ***completed*** the Grants Project Officer (PO) should notify the Grants Management Officer (GMO). In-kind assistance should either be provided during the fiscal year covered by the grant under which it is awarded or carried over into the next fiscal year agreement.

Key Steps in Implementing Section 106 Non-monetary Support in the Form of Contractor Services *(i.e. In-Kind Assistance*) under an Assistance Agreement

- State or territory formally requests in-kind assistance in the form of contractor services in lieu of Section 106 funds.

- EPA determines if in-kind assistance is appropriate and if an existing Agency contract mechanism is available. (If not, the General Services Administration Schedule contract may be a method of transferring contractor services).

- EPA works with State or territory to develop a contract Work Assignment and Technical Directive.

- EPA assigns a certified Regional contract Work Assignment Manager (WAM). State assigns a "lead contact." If the WAM is in EPA Headquarters, a Regional "lead contact" should also be identified. (If a decision is made to start a new EPA contract, a Project Officer also needs to be assigned.)

- Prepare and process a procurement request (PR) supported by agreed upon grant funding amount and use the assistance object class code on the PR.

- Funding amount is reflected on State or territory grant award document as in-kind assistance and the amount is included in the total budget costs.

- Tasks supporting the requested in-kind assistance should be included in the work plan associated with the identified grant funds. The proposed activities must be eligible under the grant authority.

- Ensure that identified existing contracts have enough "ceiling" to accept added work assignments. If not, additional work may be necessary to justify a raised ceiling in the contract.

- Statement of work for the contract work assignment should include information related to progress reports on the project (i.e., their format and time frame for submission).

- Be sure to address communications issues. The State ***cannot*** direct the work of contractors provided by an EPA contract. EPA contractors ***cannot*** be located at the State work site. The State must provide input to the EPA WAM, who then provides direction to the contractors.

- The grant funds remain in the grant object class and maintain their existing program results code (PRC).

- Contract-funded deliverables are filed with the grant files.

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APPENDIX A

Summary Guide of Section 106 Programmatic Funding Priorities to be used by EPA Project Officers in Negotiating FY 2001 Grant Work Plans Supported by Clean Water Act Section 106 Grant Funds.

A. **Improving The Standards-to-Permits Process.** Implementing the water quality-based requirements of the CWA begins with setting, reviewing, and revising State water quality standards and continues through establishment of TMDL pollutant reductions for impaired waters, apportionment of wasteload allocations to point sources and load allocations to nonpoint sources, derivation of water quality-based permit limits, and continuous assessment of progress through monitoring and watershed assessment activities. Currently the essential elements of the process - monitoring/assessment, standards, TMDLs, and permitting - are for the most part implemented in compartmentalized fashion rather than as an integrated process. Further progress in protecting and cleaning up the nation's surface waters will require far more integration to reduce or eliminate widespread redundancies and inefficiencies in these program components. This is particularly important as over the next 10 years EPA and the States are expected to develop as many as 40,000 TMDLs, including plans to apportion pollutant loads to point and nonpoint sources. The workload will also increase as water quality standards are revised based on and the Agency's new scientifically-based water quality criteria for pathogens, nutrients, and other impacts. It is EPA's view that the best way to achieve integration is on a watershed basis. Planning for monitoring and assessment, standards revisions, permit issuance, and funding should anticipate when TMDLs need to be completed in a watershed. States and EPA should work together to continue to better integrate the base water quality programs on a watershed basis in 2001.

I. Monitoring Program Priorities

Recent audits conducted by the General Accounting Office and the EPA Inspector General cited that states lack sufficient data to support development of comprehensive water quality inventories and lists of impaired waters or TMDLs. As recommended by Congress, States are encouraged to use some of the additional Section 106 money to strengthen their monitoring programs. Specifically, for FY 2001 Section 106 funding, EPA encourages States, territories, and interstate agencies to address the following priorities:

1. Development and implementation of comprehensive statewide monitoring designs for 305(b) reports and 303(d) assessments to support the measurement of attainment of water quality standards, including designated uses in rivers/streams, lakes/ponds and drinking water source waters.

2. Collection and assessment of biological, chemical and physical monitoring data in support of 305(b) reports and 303(d) assessments to determine attainment of water quality standards, including designated uses in rivers/streams, lake/ponds and drinking water source waters.

3. Implementation of data systems to store, analyze, and present monitoring data and for 305(b) reports and 303(d) assessments. This includes the Assessment Database, STORage and RETrevial (STORET) and Geographical Information System, transmission of electronic information between offices, and Internet presentation of data, assessments and reports.

4. Development and implementation of biological criteria in support of 305(b) reports and 303(d) assessments.

5. Collection and assessment of fish tissue data in support of fish consumption advisories.

II. Water Quality Standards Priorities

Our expectation is that performance agreements between Regional Offices and States and Tribes will reflect the priorities listed below. These priorities were originally in *Guidance to States, Tribes, and Regions on Priorities for the Water Quality Standards Program for FY 2000-2002*. The *Guidance* is designed to strengthen and modernize the Water Quality Standards program and its use in managing water resources on a watershed basis. The full text of the priorities may be found at http://**www.epa.gov/ost/standards/** ; excerpts are below.

Improve the administration of the water quality standards program

EPA's objective is for States and Regional Offices to administer the water quality standards program consistent with the requirements of the CWA and revisions to the Water Quality Standards Regulation (40 CFR §131.21; 65 FR 2464, April 27, 2000). To do so, States will need to enhance the quality and timeliness of their water quality standards triennial reviews. There is a significant backlog of Regional Office action on State and Tribal water quality standards submittals and on resolving disapprovals. Because State water quality standards can not be used as the basis for TMDLs or NPDES permits until EPA approval, States need to reach early agreement with Regional Offices on the water quality standards triennial review priorities and schedules. EPA will solicit the early participation by the Fish and Wildlife and the National Marine Fisheries Service in the water quality standards review process.

Strengthen the scientific basis of water quality standards.

Using the scientific information, tools, guidance and training provided by EPA, States and Tribes are to (1) adopt the *Ambient Water Quality Criteria for Bacteria*

- *1986* and *Recommended National Water Quality Criteria*; (2) use the 1999 Ammonia Update in revising their criteria; (3) collect data on which to base scientifically defensible eco-region, water body-specific numeric nutrient criteria in accordance with national guidance*;* (4) update human health criteria based on the revised Human Health Methodology; and (5) reconcile, as appropriate, the designated uses and water quality criteria for a water body and the risk assessment methodologies for developing fish and shellfish advisories and shellfish classifications.

In addition, States should review and, where appropriate, revise or adopt implementation procedures for antidegradation policies, mixing zones, and for narrative criteria to preclude adverse effects to human health, and aquatic life. As necessary, States may need to revise their water quality standards to include the protection of threatened or endangered species and the critical habitat as identified under the Federal Endangered Species Act (ESA), as part of use designations, aquatic life criteria and the applicable implementation procedures.

States should review and refine their use classification systems to more precisely define the uses to be protected. For aquatic life, this means using biological and physical assessment information to adopt scientifically defensible biological criteria (either narrative or numeric) that protect each aquatic life use. When adopting narrative biological criteria, State and Tribes should adopt procedures to translate the narrative into quantitative measures. For recreational uses, this may mean adopting subcategories of a recreational use after conducting a use attainability analysis and making a determination that primary contact recreation is not attainable.

III. Total Maximum Daily Loads (TMDL) Program Priorities

In FY 2001, States should continue to strengthen their ongoing State efforts to meet their 303(d) responsibilities under the current rule promulgated in 1985, amended in 1992, and codified at 40 CFR 130.2, 130.7, and 130.10. States' focus in FY 2001 must be on increasing the number of established TMDLs and meeting all deadlines in all court orders (including consent decrees and settlement agreements.) EPA has previously asked that States develop expeditious schedules (between 8 and 13 years) for establishing TMDLs for all listed waters and submit those schedules with their 1998 303(d) lists. **(**New Policies for Establishing and Implementing Total Maximum Daily Loads (TMDLs) - Bob Perciasepe - August 8, 1997; Implementation of Section 303(d) Unitl the New TMDL Rule Becomes Effective – Robert H. Wayland, III, December 7, 2000). EPA Regions have reported that approximately 4000 TMDLs need to be established each year during FY 2001 and FY 2002; in contrast, our records indicate only 1,118 TMDLs were established by the end of FY 2000.

Also, in FY 2001, States should be working on preparing their next section 303(d) list due on April 1, 2002. For more specific guidance on 2002 Section 303(d) list

preparation and additional guidance on TMDL development and pace, please refer to the December 7, 2000 memo "Implementation of Section 303(d) Until the New TMDL Rule Becomes Effective" from Robert H. Wayland to EPA Regional Water Division Directors.

IV. National Pollutant Discharge Elimination System (NPDES) Priorities.

The increased scope and complexity of the NPDES program as well as more public involvement, have resulted in more challenges to individual permits and more petitions to withdraw State NPDES program authorizations. Regions should work with States to ensure that permits are issued to protect human health and the environment consistent with the Endangered Species Act, and National Historic Preservation Act. States should also consider prioritizing permit issuance to address permits in impaired waters with and without TMDLs, cooling water intake structures, and permits needed to address wet weather sources, such as combined sewer overflows, concentrated animal feeding operations, sanitary sewer overflows, and storm water from municipalities, industries, and construction sites.

A related challenge is permitting individual discharges in isolation from other sources of impairment in a watershed. Although the Agency's authority to address all pollution sources is limited under the Clean Water Act to point sources, far more may be done to encourage a more holistic approach to address sources of impairment in a locality. This applies particularly to the 25 million households in the United States that are served by on-site wastewater treatment systems. These onsite systems contribute significant pollution to both surface and ground water.

States should manage their NPDES programs to address watershed-specific needs by continuing efforts to coordinate permit issuance on a geographic basis, improve coordination of standard-setting, monitoring, and permitting activities, and foster the involvement of watershed stakeholders in watershed planning activities. This also includes a periodic review of both State and municipal legal authorities to ensure proper implementation of their NPDES (especially Stormwater and Pretreatment) Programs.

The Government Performance and Results Act (GPRA) will continue to be the primary vehicle for measuring the success of the Agency's programs. The GPRA objective most relevant to the NPDES Program is to achieve, by 2005, reductions in pollutant loadings from key point and nonpoint sources by at least 11% from 1992 levels, and reduction in air deposition of key pollutants to 1990 levels. This translates to the following program subobjective:

> *"By 2005, using both pollution control and prevention approaches, reduce at least 3 billion pounds of annual point source loadings from key sources, including a combined 11 percent reduction from industrial sources, publicly owned treatment works, and combined sewer overflows."*

In FY 2001, States should address these measures and report their progress towards meeting the goals identified and Regions should work with the States in determining the applicability of non-regulatory tools like environmental management systems (EMS). EMSs provide organizations of all types with a structured approach for continually assessing and reducing significant environmental impacts, both regulated and unregulated, over time in order to complement regulatory approaches.

Under the Clean Water Act, NPDES permits may not be issued for a term longer than five years. If the permitting authority receives a complete application but does not reissue the permit before expiration, the permitting authority may administratively continue the permit beyond the expiration date. Such permits are "backlogged." The permit backlog now stands at 25 percent for major facilities and 32 percent for minor facilities. Because the overall coverage of the NPDES program continues to increase (particularly for storm water and concentrated animal feeding operations), the backlog will increase unless continuing management attention is exerted. The high backlog level is a concern because expired permits may not reflect appropriate effluent limitation guidelines, water quality standards, or total maximum daily loads within a watershed framework; without timely permit reissuance, necessary improvements in water quality may not occur. In FY98, EPA identified NPDES permit backlog as a material weakness.

EPA has developed a backlog reduction strategy which focuses permitting activities on facilities posing the greatest risk to the environment, calls for use of more permit issuance resources by EPA Regions and States, and encourages more expansive use of tools such as general permits to permit low risk facilities. In FY 2001 Regions should work with States to continue to address the backlog of NPDES permits in order to meet the following quantitative targets established by the backlog reduction strategy:

- The backlog of NPDES permits for major facilities will be reduced to 10 percent in all States by the end of calendar year 2001
- The backlog of NPDES permits for major and minor facilities will be reduced to 10 percent by the end of calendar year 2004.

Concentrated Animal Feeding Operations (CAFOs) - States should issue NPDES permits for CAFOs and, where inspections in State priority areas uncover unpermitted discharges, enforce the requirement to apply for an NPDES permit. States should also begin to develop general permits for egg producers based on EPA's agreement with the United Egg Producers (UEP) under Project XL. Copies of the agreement, which also includes Model General Permit Guidance, can be obtained at http://**www.epa.gov/ProjectXL/** or from the Project XL hotline at 202-260-5754.

Storm Water Phase II - States should begin work on general permits for small municipal separate storm sewer systems (MS4s) and small construction sites between 1 and 5 acres which must be issued by December 2002. The construction permits should be similar to those for sites disturbing greater than 5 acres. General permits for small

MS4s should require the MS4 operators to implement the "six minimum control measures": public education and outreach, public involvement/participation, illicit discharge detection and elimination, construction site runoff control, post-construction storm water management in new and redevelopment, and pollution prevention/good housekeeping for municipal operations.

Combined Sewer Overflow (CSO) - States shall issue permits that conform with the CSO Policy, ensure implementation of the nine minimum controls, and complete long term control plans, as required by Section 112 of the Wet Weather Water Quality Act of 2000.

Sanitary Sewer Overflow (SSO) - States should begin to incorporate collection system management and operation and maintenance (CMOM) requirements into high priority municipal permits, i.e. municipalities with histories of SSO problems, and eliminate any permit conditions that allow SSOs to occur.

Onsite Systems – In priority areas, States should develop legitimate approaches for bringing onsite systems under regulatory control through NPDES permits, and foster improved management of on-site systems.

Pretreatment Programs - States should prioritize issuance of NPDES permits for POTWs that have pretreatment programs which are integral to achieving needed load reductions to meet TMDLs, with histories of water quality violations, or are not achieving biosolids use/reuse goals and requirements. POTW pretreatment programs should also be a priority where the municipality is pursuing significant program integration opportunities.

With respect to State program authorization, States are required to implement new regulatory requirements within one year of promulgation or two years if statutory changes are needed. Recent regulatory changes that States should be addressing include the municipal/sludge applications (2A/2S), storm water phase II, and the NPDES II streamlining rule. States should also revise their programs to address any other regulatory changes they have not addressed since their programs were authorized.

Biosolids Program Priorities

Regions should encourage States to continue to support the biosolids program. A major focus of a successful biosolids program is information exchange. That exchange of information should consider quantitative measures that are at least as detailed as the 40

CFR Part 503 requirements. Local facilities, States, and Regions may obtain additional information from http://www.epa.gov/region08/water/wastewater/biohome/biohome.html.

Specifically Regions and States for FY 2001-2002 should address the following

priorities of the National Biosolids Program:

1. Establish an effective data system that provides information on biosolids quality and programs.

2. Work with facilities to facilitate adoption of environmental management systems (EMS) for their biosolids management programs, consistent with the EMS program developed by the National Biosolids Partnership which includes Water Environment Federation (WEF), Association of Metropolitan Sewerage Agencies (AMSA), and EPA. Information on the National Biosolids Partnership may be obtained at http://www.biosolids.org.

3. Provide effective Federal and State program oversight.

4. Delegation of Biosolids Program to the States

States should be encouraged to pursue formal authorization of State Sludge Management Programs to implement the Part 503 requirements with full Federal authority.

PCS Data Quality:

States and Regions enter data into the Permit Compliance System (PCS). This data is used to manage the National Pollutant Discharge Elimination System (NPDES) program and to measure how the program is being implemented and achieving environmental goals. The need for quality program data has never been greater. Poor data undermines EPA's ability to report permit backlog levels, success in meeting Government Performance Results Act (GPRA) commitments, and implementation of the TMDL program. Poor or missing data in PCS also prevents citizens from accessing information about their environment and presents an incomplete picture of the state of water quality and our
efforts to improve it. Technological advances will improve our ability to report on our environment in the near future, but none of those advances will be useful without a complete and accurate set of core program data now.

As Regions negotiate award of CWA Section 106 funding with their States, strong attention should be paid to directing State efforts to provide complete and accurate data into PCS. States should focus on ensuring that required data fields are populated and in reviewing existing data for improved accountability. A joint memo (copy attached) from the Office of Water and Office of Enforcement and Compliance assurance (issued on September 7, 2000) set forth a proposal to address PCS data problems. The memo identified a multi-pronged approach for improving PCS data: data clean up; short term guidance and policy changes; and accountability and maintenance. Regions should refer to this memo (copy attached) and negotiate appropriate data quality activities with

their States as part of their grant negotiation.

B. Water Enforcement and Compliance Priorities 2000-2001

The Office of Enforcement and Compliance Assurance's (OECA's) FY 2000/2001 Memorandum of Agreement (MOA) guidance sets forth the goals, priorities, and activities for the national environmental enforcement and compliance program. The MOA process communicates priorities and forms the basis for negotiating commitments with Regions/ States and for developing individual compliance and enforcement agreements between OECA and each Region. Section 106 grants continue to support the compliance and enforcement efforts undertaken at the State level to protect surface water quality. OECA's MOA guidance, in conjunction with the Section 106 grant framework document and its addendum, identifies enforcement and compliance priorities from which to negotiate State 106 work programs.

OECA's MOA guidance emphasizes state partnerships and developing National priorities complement state priorities. Specifically, the Regions and states will work jointly to develop priorities, taking into consideration national program priorities, regional priorities, and state priorities for enforcement and compliance assurance. It is recognized that states play a crucial role in the implementation of the national environmental enforcement and compliance assurance program and that work sharing arrangements to accommodate national and state priorities are negotiated in during the work plan process. As Regions and States begin to negotiate Section 106 grant work programs, they should consider both sector and media-specific priorities along with activities to support a strong core program commitment, as identified in the FY 2000/2001 OECA MOA guidance. The entire MOA guidance can be found at http://es.epa.gov/oeca/polguid/y2kmoa.pdf. The areas most directly related to Section 106 grant funding are discussed below:

Sector Priorities

The metal services sector is one priority area where there is potential for wastewater issues. Though very few metal services facilities hold NPDES permits as direct dischargers, many are indirect dischargers subject to both categorical pretreatment standards and local pretreatment requirements. States should include activities to address problems at metal services facilities as appropriate.

NPDES Priorities

The enforcement and compliance priorities for NPDES complement the program

priorities as we work to address wet weather issues. The excerpts below sets forth the rationale and performance expectations for our work under CWA wet weather:

Priority Activity: Implement programs to ensure compliance in the following wet weather areas: the Combined Sewer Overflow (CSO) Policy, the Sanitary Sewer Overflow (SSO) Enforcement Management System, the National Concentrated Animal Feeding Operations (CAFOs) Sector Strategy (including the CAFO Implementation Plan), and Storm Water regulations.

Selection Rationale: Run-off from wet weather events (i.e., overflows from combined sewers or sanitary sewers, CAFO discharges and run-off, and storm water run-off) remains a leading cause of water quality impairment as documented in Section 305(b) reports and represents a significant threat to public health. Sewer overflows contain bacteria and other pathogens which cause illnesses and lead to beach and shellfish bed closures. CAFOs pose a number of risks to water quality and public health because of the amount of animal manure discharges and runoff generated, particularly as a result of storm events. Efforts to control wet weather flows have been underway for several years and, while there are areas where regulatory development and/or consultation with the Federal advisory group are still ongoing, there are areas which are ripe for compliance assistance, compliance monitoring, and/or enforcement due to the passage of deadlines or the issuance of new policies. In addition, all four of these wet weather program areas are addressed in the President's "Clean Water Action Plan".

Performance Expectations For the Wet Weather Priority Areas:

Combined Sewer Overflows--Regions with CSOs were to ensure that all CSO dischargers, including Federal facilities, implement the nine minimum controls by January 1997, as outlined in the CSO policy. This requirement was to be included in NPDES permits or incorporated in enforcement actions. A May 19, 1998, memorandum, "Implementation of the CSO Control Policy," from Bob Perciasepe and Steve Herman to the Regions emphasized the need to track the implementation of the CSO policy. In addition, EPA issued a FY 2000 Compliance and Enforcement Strategy for addressing both CSOs and SSOs. Each Region should provide in their MOA submittal the following information: 1) names or permit number of CSO dischargers that have implemented the nine minimum controls and that have implemented, or are on a schedule to implement, a long term control plan as well as the mechanism used (e.g. permit requirements, enforcement action); 2) a plan for addressing CSO dischargers not in compliance with the CSO policy and 3) plans to verify that schedules are being met or that controls are being implemented as stated in either the permit or enforcement order compliance schedule.

Sanitary Sewer Overflows–Regions and States should follow the FY 2000 Compliance

and Enforcement Strategy for addressing both CSO and SSO discharges, as well as consider the draft proposed SSO regulation. Where they have not already done so, Regions with SSOs should: (a) continue to identify the universe of SSOs by targeting inspections at likely SSOs, including Federal facilities (by name); (b) continue to assess the magnitude of the overflows in their region; (c) target known dischargers with SSOs, especially those in priority watersheds or in areas where the receiving waters are impaired **(**e.g. shellfish bed closures, beach closures, fish advisories, or drinking water sources**)** and/or in environmental justice areas, ensuring that a minimum of 20% of the systems will be addressed each year; and indicate when they utilize the collection system management and operation and maintenance (MOM) guidance; (d) issue administrative orders, file judicial actions, and/or provide compliance assistance to the community as appropriate. Regions should plan to report in their MOA end-of-year report the number of SSOs addressed each FY and how each SSO was addressed, per guidance provided in Chapter X of EPA's "Enforcement Management System" (e.g., Notice of Violation (NOV), Administrative Order, judicial action).

Concentrated Animal Feeding Operations-- Compliance assistance and enforcement actions should be implemented, as necessary, consistent with the Joint Unified National Strategy for AFOs issued by USDA and EPA (March 1999). This Strategy references the Compliance Assurance Implementation Plan for CAFOs (March 1998) which is OECA's sector based compliance/enforcement approach for CAFOs.

The Compliance Assurance Implementation Plan calls for states to develop compliance monitoring and enforcement strategies/plans (due in October 1998) which take into account existing state programs, state priorities as well as Federal priorities, and sets forth criteria for risk based targeting. The state strategies should outline the elements of their enforcement program, including state regulatory authority, targeting, inspections, compliance assistance, complaint handling, and subsequent enforcement action options. In addition to continuing to help implement and update, as necessary, state plans (or regional plans for non-delegated states), regions should work with states to get CAFOs currently required to have permits permitted under NPDES (the OW recently issued Interim Final Guidance, Sept. 2000), and identify the following by state: total number of CAFOs and number of CAFOs in priority areas (as discussed in the March 5, 1998 Compliance Assurance Plan for CAFOs) and should track percent of total CAFOs inspected, and percent of CAFOs in priority areas inspected. CAFO inspections and enforcement should be targeted at priority watersheds, impaired waters, and/or where there is a threat to a surface water or ground water drinking water source. Regions, working with their states should identify the universe (including Federal facilities if any), and inspect 100% of all CAFOs in priority areas by FY 2001, ensure that all other CAFOs are inspected by FY 2003, and take follow-up enforcement actions as appropriate. The state strategies also need to address the use of compliance assistance. The state compliance/enforcement strategies should address how states will work with the U.S. Department of Agriculture, State Departments of Agriculture, national, state, and local trade and produce associations and organizations, soil and water conservation

districts, and community and environmental groups. Regions should coordinate compliance assistance activity with the Agriculture Compliance Assistance Center.

Storm water-- Because there is such a potentially large number of storm water dischargers, including Federal facilities, Regions will need to strategically target compliance monitoring, compliance assistance, and enforcement activities in this area. In general, Regions should address CSOs and SSOs before turning to major storm water initiatives. Regions should focus storm water inspections and enforcement where there is water quality degradation and/or a threat to public health. Priority should be given to storm water problems associated with the other OECA MOA priorities (e.g. CAFOs) and storm water dischargers to priority watersheds and/or impaired waters (e.g., discharge contributing to impairment of a drinking water source, issuance of a fish advisory, beach closure, or shellfish bed closure). States should also begin to explore ways to address inadequately functioning on-site systems that discharge to storm sewers.

Core Program Activities

In addition to the priorities laid out in the OECA MOA guidance, a successful enforcement and compliance program relies on a strong core program commitment. Attachment 4 of OECA's MOA guidance, Enforcement and Compliance Assurance Core Program Revisions, identifies general core program activities (e.g., reduce the backlog of administrative cases, follow the applicable program enforcement response policies, and provide data to national databases) along with specific core activities for the Clean Water Act programs which fall within areas of compliance incentives, compliance monitoring (where we will continue to focus on, among other sources, areas identified in the Clean Water Action Plan, such as shellfish bed and beach closures
caused by SSOs or stormwater runoff), program leadership and evaluation (which contains activities to support data systems), and enforcement actions. Refer to Attachment 4 of the FY 2000/2001 OECA MOA Guidance at **http://es.epa.gov/oeca/polguid/y2kmoa.pdf** for a more complete discussion of core program activities.

C. FY 2001 Source Water Contamination Prevention Priorities (Ground Water and Surface Drinking Water Resources)

For FY 2001, the Agency strongly recommends that each State direct Section 106 funding for source water protection and contamination prevention activities to protect both ground and surface waters used for drinking water. EPA continues to encourage each State to target *at least* 15% of its designated Section 106 grant allocation for ground water protection efforts, including where such efforts would reduce pollutants contributed by ground water to surface water base flows. Also, each State may choose to direct *additional* Section 106 funds to source water protection and contamination prevention for ground waters or surface waters used or designated for drinking water use.

Many sources of contamination threaten the nation's sources of drinking water,

whether ground water or surface water. Much of the nation's base flow is contributed by ground water. Therefore, ground water pollutants can become surface water pollutants and a contributing factor to waterbody impairments. Once ground water sources of drinking water are contaminated, it is very expensive to restore them, or to provide drinking water treatment to make them safe for human consumption whether that drinking water is drawn directly from a ground water source or from a surface water source. Therefore, the protection of ground water resources from contamination needs to be a priority for public health protection and its importance is reflected in two elements added in FY 2000 to the Section 106 grant allocation formula "non-agricultural ground water withdrawals" and "populations served by community water systems that use ground water."

Priority work for ground water activities should be framed within a State's overall water quality management program that is: 1) developed in relation to the Clean Water Act; 2) conducted in keeping with objectives to integrate public health and environmental protection priorities; and, 3) designed to achieve the maximum benefit for the goals of clean and safe water. For FY 2001 Section 106 funding, the States should address the following priorities:

Resource-based Protection Approach

EPA strongly encourages States to use Section 106 funds to develop a strategic, resource-based approach to drinking water protection that builds on source water assessments and meets both source water contamination prevention objectives and national water program objectives, including:

(1) increasing information and assistance to help localities and water communities to move towards prevention;
(2) targeting regulatory and non-regulatory programs to susceptible source waters;
(3) increasing public involvement and public education in source water contamination prevention efforts;
(4) strengthening governmental structures that would help implement contamination prevention efforts; and,
(5) increasing partnerships with private businesses to achieve source water contamination prevention.

Selective Support for Highly or Moderately Susceptible Source Waters

EPA encourages States to give priority funding consideration to activities for those waterbodies and the ground water that contributes to their base flow that have been identified as impaired or threatened public water supplies under Section 303 of the Clean Water Act or as highly or moderately susceptible to contamination through the assessment process of Section 1453 of the Safe Drinking Water Act. Directing funds to

these cases is particularly appropriate where high-priority management or prevention efforts are needed because other sources of funds from Federal and State programs are limited or non-existent.

Measuring Implementation of Effective Prevention Programs

Tracking progress on source water assessments is critical to ensuring source water protection efforts for community water systems. EPA encourages States to target some of their Section 106 funds toward the completion of all four steps of a source water assessment, plus the management measures and contingency plans at the water system level. The development of information management systems that can track progress in these areas is also an eligible activity that can be supported by Section 106 funds.

More specifically, EPA encourages States to use the Section 106 funds for the following eligible activities, as needed to support a strategic, resource-based source water protection and contamination prevention approach:

- Ground water or surface water monitoring and modeling work, as well as information management and analytical work that will support a Statewide comprehensive approach such as watershed or basin-wide planning that includes ground water and drinking water source protection;
- Data gathering to bolster Clean Water Act Section 305(b) State reporting for ground water and source water quality;
- Point and nonpoint source controls and pollution prevention efforts to address source water contamination prevention;
- Coordination efforts across a broad spectrum of agencies, programs to target funding and other resources to priority prevention and remediation/restoration activities;
- Community Wellhead Protection activities;
- Coordination efforts across Safe Drinking Water Act programs, such as integrating implementation of Underground Injection Control Program Class V well requirements with completion of source water assessments;
- Outreach and raising public awareness of source water protection activities.

September 7, 2000

MEMORANDUM

SUBJECT: PCS Data Clean-Up Proposal

FROM: Diane Regas, Deputy Assistant Administrator, /s/
Office of Water

Sylvia K. Lowrance, Principle Deputy Assistant Administrator, /s/
Office of Enforcement and Compliance Assurance

TO: Regional Administrators (Regions 1-10)

The Office of Water (OW) and the Office of Enforcement and Compliance Assurance (OECA) are proposing an effort to enter and QA/QC data in the Permit Compliance System (PCS). This data is used to manage the National Pollutant Discharge Elimination System (NPDES) program and to measure how the program is being implemented and achieving environmental goals. Poor data undermines EPA's ability to report permit backlog levels, success in meeting Government Performance Results Act (GPRA) commitments, and implementation of the TMDL program. OW and OECA plan to work with Regions and States to populate PCS with the data necessary to accurately represent the NPDES program.

The attached proposal identifies the basic program data necessary to meet this objective and outlines a strategy to enter it into PCS. While the majority of this data is already required, OW and OECA recognize that this project will require additional resources. We are prepared to work with States and Regions to facilitate this project and are considering ways to provide resources to ensure its successful completion over the next six months.

The need for quality program data has never been greater. Poor or missing data in PCS prevents citizens from accessing information about their environment and presents an incomplete picture of the state of water quality and our efforts to improve it. Technological advances will improve our ability to report on our environment in the near future, but none of those advances will be useful without a complete and accurate set of core program data now.

Your comments on the proposed data clean-up strategy are welcome. Please contact Fred Stiehl, Director, Enforcement Planning, Targeting, and Data Division, at 202-564-2290 or Chuck Sutfin, Director, Water Permits Division, at 202-260-9545 or have your staff send comments to

Kelley Volak, Water Permits Division, at 202-260-0307.

EPA PLAN FOR PCS DATA MANAGEMENT
Office of Water (OW) and
Office of Enforcement and Compliance Assurance (OECA)

Problem Statement

The Permit Compliance System (PCS) is the main repository of NPDES program data; yet its data quality and completeness are often poor. Many **required** fields (such as permit issuance and expiration date, facility location address, lat/long, inspections, and enforcement actions) are not populated accurately or consistently, undermining the usefulness of PCS as a tool for tracking permit backlog, Government Performance and Results Act (GPRA) commitments, public access, and the total maximum daily load (TMDL) program. On February 22, 1999, a joint memo on Improving Data in PCS was issued by the Office of Wastewater Management and the Office of Compliance. (See http://intranet.epa.gov/oecagrph/oc/eptdd/teb/otis/dataimprov.html) This memo addressed a number of these same problems, and while some improvements to the data have been made, overall entry and data quality for the data elements referenced in the memo have not significantly improved.

Number and Percent of Facilities in PCS with Data Missing for Certain Fields:

	Location (RST1, RCTY, RZIP)		Facility Lat/Long (FLAT/FLON)		Facility HUC (FHBC)		Design Flow (FLOW)	
Major	1922	26%	301	5%	255	4%	1702	26%
Minor	24223	43%	22388	42%	18899	36%	27798	53%

Additionally, 11% of minor facilities in PCS have no permit issuance or expiration dates. The result of the missing dates is that we cannot accurately calculate the size of the NPDES universe or the permit reissuance backlog count. *(from 7/00 PCS extract)* Assessing and eliminating the permit backlog has been an OW priority for the past two years**.**

Basic Inspection and Enforcement Action Data Appears to Be Missing

Analysis of the FY 1999 data indicates that PCS may not reflect the true number of inspections conducted and enforcement actions taken in many of the Regions and States. The essential inspection and enforcement data elements are already required and most States and Regions are doing a good job getting the information into the system. However, there are several areas where problems seem to exist. In 14 States, the inspections performed are less than one-half the national average of 29%. Similarly, entry of enforcement actions (EPA and State civil/judicial and administrative actions) appears to be problematic in several States. On average, 2.6 of every 100 standard permits have received an EPA or State enforcement action over a two-year period. In 15 States, the number of Regional and State enforcement actions is less than one-third of this national average.

These statistics suggest that there may be data quality/data entry problems in 14 or 15 States which

give the appearance that compliance monitoring or enforcement activities are not occurring, when in fact they probably are. This is particularly troubling given that PCS is the primary source for facility-level statistical data about the EPA/State compliance and enforcement programs. From a public access perspective, this is also disconcerting when PCS shows significant violations and the resulting enforcement actions are missing.

Poor Data Quality Prevents Accurate Responses to Basic Questions

OW and OECA are frequently asked by Congress, environmental groups, industry groups, and the public to provide data regarding the nature of facilities regulated by individual NPDES permits. As Freedom of Information Act requests increase and Internet technology brings PCS data to a broader spectrum of public users, it is imperative that PCS accurately reflect a facility's permitting and compliance record. From a management perspective, we are currently faced with technical issues that require us to predict or model loadings to water bodies (e.g., TMDL development, GPRA loading estimates, effluent guidelines (ELG) cost/benefit assessments). Many of these questions could be answered if core data elements were complete for all major and minor facilities. As noted above, however, these data are not complete and the reliability is unmeasured. Examples of critical questions that cannot be accurately answered include:

- How many facilities are covered by NPDES permits in each State and Territory?
- What is the correct street address of a particular permitted facility?
- How many permits are current or expired?
- Who discharges to a specific waterbody (e.g., where a TMDL is being developed)?
- Which dischargers have the potential to discharge certain types of pollutants?
- Where are certain types of dischargers (e.g., concentrated animal feeding operations (CAFOs)) located?
- Which facilities have been inspected and which have not?
- Which facilities have had enforcement actions and which have not?

Poor Legacy Data Will Impact the Modernization Process

PCS is currently undergoing a modernization process which will require the migration of required data elements into the new system, either from legacy PCS or directly from State databases. The data currently in PCS, specifically for minor facilities, is too incomplete to facilitate program implementation, even if it was housed in a modern, user-friendly system. Nor can we rely solely on the migration of data from State databases to solve this problem since we do not have a complete picture of the quality or quantity of State data or the technological level of their systems.

<u>Actions</u>

To enable the NPDES permitting and enforcement programs to use PCS data in the implementation of their work, better prepare legacy PCS for the eventual migration of its data into modernized PCS, ensure the continued maintenance of PCS data, provide the public with accurate information about the status of permitted facilities in their communities, and begin preparations for the eventual inclusion of facilities covered under non-storm water general permits, we will need to adopt a multi-pronged approach.

A. Data Clean-Up

To answer basic questions regarding the status of national permitting and compliance efforts, the Agency must be able to draw on certain "essential" data elements for all permitted facilities. "Essential" data elements can be defined as those without which we cannot meaningfully describe, characterize, or manage our program. If we take the questions noted above as those that allow us to meaningfully characterize our program, then we can identify a fairly short list of data elements that will allow us to provide answers; at least for facilities covered by individual permits. Specifically, having complete and accurate data elements that provide basic facility and outfall data (e.g., identification, location, discharge type) would allow us to answer basic programmatic questions and provide a solid foundation upon which future modernization efforts can be built. Therefore, for the short-term (next 6 months) data clean-up effort, we are proposing to address the "essential" data elements listed below.

We believe that the questions noted above can be answered in a meaningful way if the following data fields in PCS are fully populated for all **individually permitted dischargers**, major and minor:

Requested PCS Data Fields for Individually Permitted Dischargers	**Current WENDB Requirement**	
	For both Majors and Minors	**For Majors Only**
1) facility name	**X**	
2) facility location -- address	**X**	
3) outfall (pipe) level locational data- HUC – Hydrologic Unit Code Reach segment Latitude Measure and Longitude Measure Horizontal Accuracy Measure Horizontal Reference Datum Horizontal Collection Method Source Map Scale Number, for non-GPS methods		 **X** **X** **X** **X** **X**
3.5) facility location – for non-discharging facilities Latitude Measure and Longitude Measure Horizontal Accuracy Measure Horizontal Reference Datum Horizontal Collection Method Source Map Scale Number, for non-GPS methods (please see **Attachment 1** for a discussion of locational data elements and the Latitude/Longitude Data Standard)	 **X** **X** **X** **X** **X**	
4) permit issuance date	**X**	
5) permit expiration date	**X**	
6) permit effective date (New WENDB data element, June 2000 PCS Steering Committee vote)	**X**	
7) permit application received date	**X**	

8) SIC (will eventually become NAICS)	**X**	
9) EPA-issued/State-issued permit/Tribe-issued	**X**	
10) flow (required as design flow or average process flow)	**X**	
11) are permit limits based on a wasteload allocation (WLA) as part of an approved TMDL –yes or no? (not a current field)		
12) inspection	**X**	
13) enforcement action		**X**
14) penalties (Administrative Penalty Orders required for EPA entry only. Proposing that Regions increase data entry of APOs into PCS)		**X**
15) major/minor permit rating sheet score (New WENDB data element, June 2000 PCS Steering Committee vote)	**X**	

OW and OECA are currently developing guidance for PCS data specialists to address the input of the above-listed fields and a Permit Writer's Summary Sheet listing essential permit elements in an accessible format. We plan to distribute those documents in approximately one month.

Most of these data elements are already required WENDB fields. Those above-listed elements which are not currently WENDB also represent significant Agency needs.

At this time, we are only requiring those fields for facilities covered under individual permits. However, our inability to track or even count the estimated 50,000 facilities covered under non-storm water general permits is a significant program weakness and we will eventually request this data for those facilities, also. At present, we encourage States and Regions who are currently using PCS to track facilities covered under general permits to follow the recommended guidance (which we will clarify and reissue) for PCS data input to improve national consistency. We will explore future methods to obtain facility and discharge data on other types of point sources, including storm water and CAFOs. Some of these methods may involve electronic application and reporting to facilitate automatic population of PCS fields.

OW and OECA Propose to Take this Approach to Clean-up PCS Data:

- Print a report from PCS for each State listing every active permit and the above-mentioned data for that facility, flagging the permits and facilities that are missing those data pieces or contain facility latitude/longitude data that is obviously wrong (these files were already created when a comparison of lat/long data was made to State and county level-data). To prevent duplication of effort, we will also send reports from other EPA databases that may contain this information (e.g., TMDL assessment database developed by Agency contractors) for each State.
- Send the report to each Region (who will send to their respective States). The States would print the same report from their own system, if possible, or "fill in the blanks", where appropriate. The State would send the report back to EPA.
- An EPA contractor, either through OW or OECA, would key the corrected or missing data

into PCS.
- If certain States are unable to provide the necessary data, resources might be reserved for contractor visits to the States to obtain this data.

As an alternative, grant dollars might be given directly to States that agree to this undertaking. Preliminary cost estimates for this clean-up exercise are approximately $500K, representing, where necessary, contractor data entry and State and Regional site visits to assist with data clean-up.

B. Short-term Guidance and Policy Changes

Policy changes and minor system changes may be required to clarify needs and requirements:

- Include outfall lat/long data as WENDB required elements for minors.
- If possible, add or modify a current PCS field designating TMDL implementation.
- Provide guidance and training to permit writers re-emphasizing the importance of including the above-mentioned facility-level and outfall-level data in NPDES permits.
- Provide clear guidance on which individual permit elements are essential and how they should be entered into PCS. This guidance should address the need to enter the15 fields mentioned above.
- Encourage States and Regions to use existing structure within PCS to capture critical elements for facilities covered under general permits and issue guidance on this preferred method for entering this data.
- Examine the issue of enforcement action reporting to better define PCS codes, and determine a nationally-consistent way for associated penalty information to be entered by Regions and States.

C. Accountability and Maintenance

Processes must be instituted to ensure that PCS data is maintained completely and accurately. While facilities do not typically change location, their active/inactive status does change (they may close, apply for coverage under a general permit, or connect to a POTW), and we will devise a feedback loop that provides the States and Regions with a window into data used by HQ so that significant gaps can be addressed immediately.

PCS Enhancements

OECA is investigating the possibility of making a minor enhancement to PCS to ensure that issuance and expiration dates are updated regularly. Currently, new pipe and limit data can be entered when a permit is reissued without an update to the permit issuance and expiration date fields. As a result, permits are reissued, but issuance and expiration dates in PCS do not reflect this. PCS edit software may be enhanced to only allow pipe and limit data updates when the permit issuance and expiration dates have also been updated.

Promote Agency-wide Coordination

EPA is currently working to integrate data by location across program systems, promoting the use of EPA's data resources for a wide array of cross-media analyses, such as community-based ecosystem management and environmental justice. The Locational Data Improvement Project (LDIP) is an Agency-wide effort to identify, collect, verify, store, and maintain an accurate, consistently documented

set of locational data for entities of environmental concern. A secondary objective is to support the infrastructure needed to manage these data in a manner that yields integration across national, regional, tribal, and state systems. The LDIP works with States and Regions to obtain and store latitude/longitude coordinate information of documented origin for all of EPA's regulated facilities and sites, operable units, and environmental monitoring and observation locations. Please see **Attachment 2** for a list of Regional GIS coordinators.

Website

OECA is considering the future development of a PCS data website which would display, by permit and in aggregate, the basic facility information (name, issuance and expiration dates, lat/long) contained within PCS, allowing States and Regions and, eventually, permittees to view the data that EPA includes in its public reports. This site could potentially provide an impetus for filling in missing data and correcting incorrect data.

Conclusions

There are no technical impediments to collecting and populating the core data elements for all existing NPDES individual permit holders. The data elements that have been identified for "clean up" have always been, and will remain, necessary to accurately characterize all point source dischargers.

Correcting and backfilling these critical data elements will allow us to provided more realistic and meaningful answers to questions from Congress, environmental groups, industry groups, and the public, in the short term, and will facilitate and improve data transfer to the modernized PCS system in the long term.

Over the next 6 months, OW and OECA commit to:

- Provide clear guidance to PCS data specialists on which individual permit elements are essential and how they should be entered into PCS. This guidance should also offer options for obtaining certain data elements, especially locational elements.
- Develop a Permit Writer's Summary Sheet listing essential permit elements in an accessible format.
- Secure resources to assist with the data clean-up and data entry effort.
- Issue guidance outlining the requirements for tracking individual facilities covered under non-storm water general permits within PCS. Work with States and Regions to migrate this facility-level data into PCS when it already exists in State systems.

ATTACHMENT 1

Agency Latitude/Longitude Data Standard

The Reinventing Environmental Information (REI) Program, in concert with ECOS, has identified the implementation of a data standard for recording spatial coordinates (i.e., lat and long) and associated information about the coordinates as a major Agency goal. The Agency Latitude/Longitude Data Standard is scheduled to be adopted by EPA under the REI Program. The draft data standard will be reviewed by the EPA Geographic Information System (GIS) work group for use in updating the *Method Accuracy Description (MAD) Information Coding Standards* from v 6.1 to v 6.2. (This document forms EPA's Locational Data Policy)

The standard requires programs that store geographic coordinates to document the method, accuracy, and description by which the coordinates were established to provide credibility for the coordinates and to allow an assessment of their accuracy. Additionally, these standard elements will be used by the Envirofacts Locational Reference Tables (LRT) as well as Agency information systems designed to map EPA programs and their relationship to improved environmental quality. For additional information on the EPA Lat/Long Data Standard, please review the attached .pdf file or see http://www.epa.gov/edr

Accurate spatial coordinates will allow OW and OECA to correctly attribute individual NPDES dischargers to receiving waterbodies, especially those that are impaired. This will be necessary to determine TMDL implementation levels, to prioritize permit issuance, and to provide Congress and the public with up-to-date information on waterbody health. While we recognize that this information is not always readily available, we want to take advantage of instances where it does exist and ensure that national-level and State-level data are consistent. Many States have moved forward with aggressive GIS programs to obtain this information and a network of GIS coordinators exists at the State and Regional level, creating opportunities for coordination and data sharing. See **Attachment 2** for the list of GIS Regional coordinators.

ATTACHMENT 2

List of Regional GIS Coordinators

Region 1 - Mike Macdougall

Region 2 - George Nossa, Harvey Simon

Region 3 - Wendy Bartel, Don Evans

Region 4 - Rebecca Kemp, Henry Strickland, Gary S. Davis, Lisa Gordon (part-time)

Region 5 - Stephen Goranson, Noel Kohl, Barry Bolka

Region 6 - David Parrish

Region 7 - Vickie Damm

Region 8 - Karl Hermann, Tony Selle

Region 9 - Warren Beer, Cheryl Henley

Region 10 - Ray Peterson, Dan Matheney

There is a web site at <http://internet.epa.gov/gis/twg/personne.htm>.

February 1, 2000

BUSINESS RULES FOR LATITUDE/LONGITUDE DATA STANDARD

United States Environmental Protection Agency
Office of Information Collection
401 M Street, SW.
Washington, DC 20460

CONTENTS

1.0 THE STANDARD

a. The purpose of the standard is to establish the data infrastructure necessary to allow data sharing and secondary use, based on location, thereby promoting the use of EPA's data resources for cross-media environmental analyses and management decisions.

b. This latitude/longitude data standard establishes the requirements for documenting latitude and longitude coordinates, and related method, accuracy, and description data for places of interest to the Environmental Protection Agency (EPA). Places include facilities, sites, monitoring stations, observation points, and other features regulated or tracked under Federal environmental programs within the jurisdiction of the EPA.

c. This standard does not establish a new reporting requirement for the regulated community or a new data collection requirement for EPA programs. It does, however, require programs that store geographic coordinates to document the method, accuracy, and description by which the coordinates were established to provide credibility for the coordinates and to allow an assessment of their accuracy.

Note: The intent of this standard is to ensure that sufficient information is available with each set of locational data to enable an assessment of the precision and accuracy of that data. This assessment is based on the method, accuracy and description information.

2.0 DEFINITIONS

a. *Latitude* is the measure of the angular distance on a meridian north or south of the equator.

b. *Longitude* is the measure of the angular distance on a meridian east or west of the prime meridian.

c. *Vertical Measure* is the vertical distance in meters either above or below a reference surface.

d. *Accuracy* is the degree of correctness of a quantity or expression.

e. *Precision* is the degree to which the correctness of a quantity is expressed.

f. A *Datum* is a single piece of information used as a basis for calculating or measuring.

g. The *Data Standard Steward* for the Latitude/Longitude Data Standard is the person or organization to whom is delegated the responsibility for managing the data resources relevant to EPA's Latitude/Longitude Data Standard.

h. The *Program System Data Stewards* for Latitude/Longitude data are the individuals delegated the responsibility for managing latitude/longitude data for EPA program systems.

i. The EPA *Environmental Data Registry* (EDR) is the central repository and reference tool for Agency data elements and other objects, such as business rules.

j. *Metadata* is data that describes and defines other data. For the purpose of this standard, metadata refers to the data elements for method, accuracy, and description that describe and define the measured horizontal and vertical geographic coordinates.

3.0 APPLICABILITY

a. This standard is applicable to all programs which record locational information as required by the Locational Data Policy (LDP), dated April 8, 1991.

b. This standard applies to both automated and manual information systems. All new and re-engineered information management systems that plan to store locational data are required to include all metadata for documentation.

c. This standard is to be employed by writers of Agency regulations or by persons developing proposed legislation that will result in the collection of locational data.

d. This standard is applicable to Information Collection Requests (ICRs) where program offices have determined that there is a need to collect locational data.

e. This standard is applicable to existing and future information management systems.

f. This standard applies only to point locations. Documentation requirements for linear or polygonal locations are established by the Federal Geographic Data Committee and other Standards Organizations external to the Agency.

4.0 DATA REQUIREMENTS

a. The following data are mandatory for documenting locational information about features of environmental concern:

- Latitude Measure and Longitude Measure, recorded in degrees and decimal degrees.

- Horizontal Accuracy Measure, recorded in meters. This data element is usually derived, based on the collection method.

- Horizontal Collection Method, reported with standard values for text or code.

- Horizontal Reference Datum, reported with standard values for name or code.

- Reference Point (i.e., the place where coordinates were determined), reported with standard values for text or code.

- Source Map Scale Number, required for all horizontal data collection methods except for methods using Global Positioning System (GPS), reported as a number representing one unit on a map or photo.

b. The following data are optional for documenting locational information about features of environmental concern:

- Date of Collection (i.e., the date when the coordinates were determined).

- Source of Data (i.e., the group or organization who collected the data), reported with standard values for text or code.

- Comments about the Coordinates, reported with text.

- Verification Method (i.e., the method used to verify the accuracy of the coordinates), reported with standard values for text or code.

- Geometric Type (i.e., Line, Point, Area, Region, or Route), reported with standard values for name or code. This is required for data repositories where more than one geometric type is documented.

- Vertical Measure recorded in meters, in which case the following are required:

  · Vertical Collection Method, reported with standard values for text or code.
  · Vertical Accuracy Measure, recorded in meters.
  · Vertical Datum, reported with standard values for name or code.

c. Detailed information about the data elements for latitude and longitude and the related method, accuracy, and description that are required to document the location of a place of interest to EPA, including definitions, standard values, and data transfer formats, can be found at the EPA Environmental Data Registry (EDR) web site. http://www.epa.gov/edr/. An overview of the data elements is provided in Appendix A.

d. Current values of controlled codes and names may be found in the EDR. They are updated as required by changes in methodology and technology.
Note: The current value sets have been changed since the Method Accuracy Description (MAD) Version 6.1 document, dated November 7, 1994.

5.0 PROCESSING

a. While this standard is not intended to place an additional burden beyond that already imposed by existing EPA policy on program systems and states for collecting locational data, it is recognized that adherence to the Locational Data Policy and recording of these required data items may require additional costs and reporting burden.

b. Where all locational coordinates for a program are determined by the same source and are based on the same method of collection and reference datum, those common data values may be documented only once with the data set; they are not required to be inserted in each record in the data set.

c. Program systems can choose to acquire or derive locational data rather than collecting it directly. In fact, acquisition from third parties or from private enterprises will generally result in more consistent quality locational data than can be realized from self reporting.

d. The preferred Horizontal Collection Method is GPS, since agency policy establishes a 25 meter accuracy goal.

e. The following rules are preferred for display and presentation of locational data:

1) Latitude and longitude are measured in degrees and decimal portions of degrees and are recorded according to the measured precision, up to a maximum of six decimal positions.

2) Where degrees latitude are less than 10 or degrees longitude are less than 100, leading zero(s) must be given (e.g., 09 degrees latitude; 006 or 089 degrees longitude).

3) For display, latitude measure is always preceded by a plus (+) symbol for points on or north of the equator and a minus (-) symbol for points south of the equator; longitude is always preceded by a minus (-) symbol for points west of the prime meridian and a plus (+) symbol for points on or east of the prime meridian.

4) Accuracy is always determined in meters and is displayed as plus or minus (+/-) the determined value.

5) Where a set of latitude and longitude points are recorded to represent a line, area, region, or route, the reference points and the vertical measure, where applicable, must be recorded for each coordinate. Where other metadata for the set of coordinates are identical for each reference point, consideration can be given to storing only one complete set of metadata to represent the collection method, reference datum, data source, accuracy, verification method, collection date, and source map scale number. A complete set of metadata, however, is required for each point for data transfer, as indicated in the following paragraph.

f. For data transfer the following rules are recommended:

1) Latitude always precedes longitude, followed by vertical measure, where applicable.

2) Directional symbols (+/-) must precede measured values for latitude, longitude, and vertical measure, and decimal points must be expressed.

3) Latitude, longitude, and vertical measure must be transferred with only the number of decimal places that indicate precision.

4) A set of coordinates that represents a point, line, area, route, or region shall include, as a minimum, all mandatory locational data elements for each point in the set.

5) It is acknowledged that there is a wide variety of GIS storage formats. Transfer of locational data may take place in a variety of formats contingent upon identification of that format and at a minimum the mandatory data elements are supported by that format.

6.0 ROLES AND RESPONSIBILITIES

a. The Chief Information Officer (CIO) in conjunction with the EPA Geographic Information Systems (GIS) Workgroup will:

1) Ensure adherence to these business rules and will be responsible for the resolution of conflicts and issues relating to these business rules, including applicability.

2) Provide guidance and technical information to program offices and the regulated community in meeting the requirements of this standard.

3) Ensure the appointment of a Data Standard Steward for Latitude/Longitude Data, distinct from Programmatic Data Stewards. The Data Standard Steward will be responsible for the accuracy, reliability, and currency of the data standard.

4) Maintain a repository of the valid data values for standard codes, names, and text in the Environmental Data Registry.

5) Maintain a central repository of locational data coordinates for places of interest to EPA (i.e., the Locational Reference Tables in Envirofacts).

b. The CIO will be responsible for issuing waivers from compliance with this standard in accordance with the procedures laid out in Section 8 of these business rules.

c. Senior Information Resources Management Officers (SIRMO) and Regional Information Resource Management (IRM) Branch Chiefs will:

1) Promote compliance with this standard.

2) Approve application for waiver from this standard and submit it to the Chief Information Officer.

d. System Program Managers will:

1) Ensure that this standard is implemented as applicable in their systems.

2) Work collaboratively with the CIO on continuing standards development and implementation.

3) Identify and bring forward potential conflicts between these business rules, the underlying standards, and program systems needs.

7.0 IMPLEMENTATION

a. The EDR must contain detailed information about the standard Latitude/Longitude data elements and current value sets.

b. EPA's REI national systems will implement this latitude/longitude data standard and accept new data in the standard latitude/longitude data formats with standard data values no later than February 2002. Other systems will implement this standard when they re-engineer.

8.0 PROVISION FOR WAIVER

a. The Agency's CIO may grant waivers for sufficient reasons.

b. Applications of a waiver shall contain:

5) An outline of the reasons why the data standard should not be implemented.

6) A risk assessment and cost-effectiveness evaluation of continued non-compliant operation.

7) Approval of the decision officials in the requesting office, as defined by EPA's System Life Cycle management policy and by the organizations's SIRMO.

c. The CIO shall notify the applying office in writing of the disposition of the waiver within 60 days of receipt.

9.0 MAINTENANCE

a. This standard will be reviewed at a minimum of 3-year intervals by the data steward (e.g., to determine the need for updates).

b. The reviews shall occur more frequently where appropriate, to ensure that the standard remains current with changing technology.

c. The Data Standard Steward shall submit proposed updates to the Environmental Data Registry for inclusion in the standard.

10. REFERENCES

a. *Chapter 13 - Locational Data, IRM Policy Manual, 2100 Chg 2, 4/8/91.* Agency Catalog of Data Policies and Standards, United States Environmental Protection Agency, Administration and Resources Management, PM-211D, 21M-1019, July 1991.

b. *Draft Proposed Locational Data Element Definitions and Data Values for the EPA Latitude/Longitude Data Standard*, U.S. Environmental Protection Agency, Office of Information Resources Management, March 4, 1998.

c. *Geographic Information - Part 11: Spatial referencing by coordinates*, ISO/TC211 N609, November 10, 1998.

d. *Geospatial Positioning Accuracy Standards, Part 3: National Standard for Spatial Data Accuracy*, Federal Geographic Data Committee (FGDC), FGDC-STD-007.3-1998.

e. *GIS Technical Memorandum 3, Global Positioning Systems Technology and its Application in Environmental Programs*, United States Environmental Protection Agency, Administration and Resources Management, PM-225, 600-R-92-036, February 1992.

f. *Locational Data*, IRM Policy Manual, Chapter 13, 2100 Chg 2, April 8, 1991.

g. *Locational Data Policy Implementation Guidance, Guide to Selecting Latitude/Longitude Collection Methods*, United States Environmental Protection Agency, Administration and Resources Management, PM-211D, 220 B-92-008, March 1992.

h. *Locational Data Policy Implementation Guidance, Guide to the Policy*, United States Environmental Protection Agency, Administration and Resources Management, PM-211D, 220 B-92-008, March 1992.

i. *Method Accuracy Description (MAD) (Version 6.1) Information Coding Standards for the U.S. Environmental Protection Agency's Locational Data Policy*, LDP Sub-Work Group of the Regional GIS Work Group, November 7, 1994.

j. *Representation of Geographic Point Locations for Information Interchange*, American National Standard for Information Systems, ANSI X3.61-1986.

k. *Requirements for Locational Data in the Safe Drinking Water Information System* (SDWIS), EPA 816-R-98-004, August 1998.

l. *Spatial Data Transfer Standard*: FIPS 173-1, U.S. Geological Survey, June 1994.

m. *Standard representation of latitude, longitude and altitude for geographic point locations*, International Standard, ISO 6709-1983(E).

n. *Summary Report of Locational Data Elements for the Latitude/Longitude Data Standard*, SDC-0055-057-KG-7032, May 19, 1998.

APPENDIX A

Standard Data Elements

Standard Data Elements

EDR DATA ELEMENTS	PROPOSED DEFINITIONS	FORMAT	VALUE SET	Names of Data Elements in MAD Codes v. 6.1 (Informational)
MANDATORY				
Latitude Measure (DE 5518:1)	The measure of the angular distance on a meridian north or south of the equator.	A(6) - A(10) +/-DD.dddddd	No	Latitude
Longitude Measure (DE 5520:1)	The measure of the angular distance on a meridian east or west of the prime meridian.	A(7) - A(11) +/-DD.dddddd	No	Longitude
Horizontal Collection Method				Method of collection Text or Code
Horizontal Collection Method Text (DE 5731:1)	The text that describes the method used to determine the latitude and longitude coordinates for a point on the earth.	A(60)	Yes	
Horizontal Collection Method Code (DE 5238:1)	The code that represents the method used to determine the latitude and longitude coordinates for a point on the earth.	A(3)	Yes	
Horizontal Accuracy Measure (DE 5264:1)	The measure of the accuracy (in meters) of the latitude and longitude coordinates.	A(6) in meters	No	Accuracy Value and Unit
Reference Point				Description Category Text or Code
Reference Point Text (DE 5288:1)	The text that identifies the place for which geographic coordinates were established.	A(50)	Yes	
Reference Point Code (DE 5608:1)	The code that represents the place for which geographic coordinates were established.	A(3)	Yes	
Horizontal Reference Datum				Horizontal Datum Name or Code

EDR DATA ELEMENTS	PROPOSED DEFINITIONS	FORMAT	VALUE SET	Names of Data Elements in MAD Codes v. 6.1 (Informational)
Horizontal Reference Datum Name (DE 5292:1)	The name that describes the reference datum used in determining latitude and longitude coordinates.	A(7)	Yes	
Horizontal Reference Datum Code (DE 5308:1)	The code that represents the reference datum used in determining latitude and longitude coordinates.	A(3)	Yes	
Source Map Scale Number (DE 5318:1)	The number that represents the proportional distance on the ground for one unit of measure on the map or photo.	A(9)	No	Source Scale

EDR DATA ELEMENTS	PROPOSED DEFINITIONS	FORMAT	VALUE SET	Names of Data Elements in MAD Codes v. 6.1 (Informational)
OPTIONAL				
Data Collection Date (DE 5296:1)	The calendar date when data were collected.	Date(8) YYYYMMDD	No	Date of Collection
Coordinate Data Source				Source Name or Code
Coordinate Data Source Name (DE 5322:1)	The name of the party responsible for providing the latitude and longitude coordinates.	A(35)	Yes	
Coordinate Data Source Code (DE 5310:1)	The code that represents the party responsible for providing the latitude and longitude coordinates.	A(3)	Yes	
Location Comments Text (DE 5616:1)	The text that provides additional information about the geographic coordinates.	A(150)	No	Description Comments
Vertical Measure (DE 5612:1)	The measure of elevation (i.e. the altitude), in meters, above or below a reference datum.	A(10) in meters	No	Vertical Measure
Vertical Collection Method				Vertical Measure Method of Collection Text or Code

EDR DATA ELEMENTS	PROPOSED DEFINITIONS	FORMAT	VALUE SET	Names of Data Elements in MAD Codes v. 6.1 (Informational)
Vertical Collection Method Text (DE 5326:1)	The text that describes the method used to collect the vertical measure (i.e., the altitude) of a reference point.	A(60)	Yes	
Vertical Collection Method Code (DE 5314:1)	The code that represents the method used to collect the vertical measure (i.e., the altitude) of a reference point.	A(3)	Yes	
Vertical Accuracy Measure (DE 5312:1)	The measure of the accuracy (in meters) of the vertical measure (i.e., the altitude) of a reference point.	A(8) in meters	No	Vertical Measure Accuracy
Vertical Reference Datum				Vertical Datum Name or Code
Vertical Reference Datum Name (DE 5324:1)	The name of the reference datum used to determine the vertical measure (i.e., the altitude).	A(17)	Yes	
Vertical Reference Datum Code (DE 5306:1)	The code that represents the reference datum used to determine the vertical measure (i.e., the altitude).	A(3)	Yes	
Verification Method				Verification Text or Code
Verification Method Text (DE 5737:1)	The text that describes the process used to verify the latitude and longitude coordinates.	A(60)	Yes	

EDR DATA ELEMENTS	PROPOSED DEFINITIONS	FORMAT	VALUE SET	Names of Data Elements in MAD Codes v. 6.1 (Informational)
Verification Method Code (DE 5268:1)	The code that represents the process used to verify the latitude and longitude coordinates.	A(3)	Yes	
Geometric Type				Point-Line-Area Name or Code
Geometric Type Name (DE 5761:1)	The name that identifies the geometric entity represented by one point or a sequence of latitude and longitude points.	A(6)	Yes	
Geometric Type Code (DE 5614:1)	The code that represents the geometric entity represented by one point or a sequence of latitude and longitude points.	A(3)	Yes	

State Breakdown of the Number and Percentage of NPDES Standard Permits with Missing Data in PCS (as of July 2000)

	# of NPDES Ids		Facility Name				Location - Street				Location - City				Location - Zip				Lat/Long				SIC Code			
	NPID		NAM1				RST1				RCTY				RZIP				FLAT/FLON				SIC2			
			Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors	
State	Majors	Minors	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
AK	46	280	0	0%	1	0%	0	0	108	39%	3	7%	109	39%	10	22%	168	60%	1	2%	178	64%	0	0%	0	0%
AL	208	1390	0	0%	4	0%	2	1%	14	1%	20	10%	564	41%	109	52%	1058	76%	2	1%	476	34%	0	0%	6	0%
AR	109	729	0	0%	0	0%	1	1%	14	2%	0	0%	14	2%	1	1%	224	31%	0	0%	13	2%	0	0%	0	0%
AS	4	3	0	0%	0	0%	1	25%	0	0%	1	25%	0	0%	0	0%	0	0%	4	100%	2	67%	0	0%	0	0%
AZ	43	144	0	0%	0	0%	0	0%	5	3%	4	9%	16	11%	0	0%	4	3%	5	12%	44	31%	0	0%	15	10%
CA	245	684	0	0%	0	0%	9	4%	31	5%	2	1%	21	3%	2	1%	17	2%	38	16%	585	86%	0	0%	32	5%
CO	102	421	0	0%	0	0%	13	13%	91	22%	58	57%	247	59%	68	67%	270	64%	10	10%	393	93%	0	0%	38	9%
CT	116	128	0	0%	3	2%	33	28%	104	81%	33	28%	104	81%	33	28%	104	81%	14	12%	114	89%	2	2%	35	27%
DC	4	12	0	0%	0	0%	2	50%	9	75%	2	50%	10	83%	2	50%	10	83%	0	0%	2	17%	0	0%	0	0%
DE	24	41	0	0%	0	0%	2	8%	7	17%	0	0%	7	17%	1	4%	7	17%	1	4%	1	2%	0	0%	7	17%
FL	237	350	0	0%	0	0%	3	1%	16	5%	3	1%	14	4%	42	18%	89	25%	0	0%	12	3%	0	0%	7	2%
GA	169	783	0	0%	0	0%	164	97%	778	99%	166	98%	778	99%	166	98%	778	99%	18	11%	437	56%	0	0%	39	5%
GU	8	11	0	0%	0	0%	0	0%	0	0%	6	75%	1	9%	1	13%	0	0%	8	100%	10	91%	0	0%	0	0%
HI	24	39	0	0%	0	0%	0	0%	0	0%	1	4%	8	21%	0	0%	0	0%	1	4%	18	46%	0	0%	10	26%
IA	123	1658	0	0%	0	0%	0	0%	74	4%	2	2%	551	33%	0	0%	52	3%	0	0%	161	10%	0	0%	5	0%
ID	44	278	0	0%	0	0%	1	2%	54	19%	2	5%	53	19%	11	25%	72	26%	2	5%	126	45%	0	0%	0	0%
IL	268	1787	0	0%	0	0%	12	4%	160	9%	0	0%	51	3%	0	0%	104	6%	0	0%	88	5%	0	0%	21	1%
IN	174	1180	0	0%	0	0%	1	1%	39	3%	0	0%	29	2%	0	0%	95	8%	1	1%	110	9%	0	0%	0	0%
KS	58	1161	0	0%	6	1%	46	79%	775	67%	46	79%	774	67%	50	86%	1037	89%	4	7%	1157	100%	0	0%	164	14%
KY	127	1861	0	0%	0	0%	0	0%	13	1%	0	0%	6	0%	2	2%	31	2%	0	0%	19	1%	0	0%	1	0%
LA	245	3635	0	0%	9	0%	44	18%	1758	48%	45	18%	1883	52%	67	27%	2253	62%	12	5%	1997	55%	0	0%	55	2%
MA	146	522	0	0%	2	0%	0	0%	149	29%	0	0%	142	27%	0	0%	159	30%	1	1%	275	53%	0	0%	56	11%
MD	99	565	0	0%	0	0%	15	15%	68	12%	14	14%	78	14%	32	32%	212	38%	11	11%	218	39%	0	0%	2	0%
ME	94	257	0	0%	2	1%	1	1%	69	27%	0	0%	57	22%	0	0%	61	24%	8	9%	221	86%	2	2%	21	8%
MI	181	543	0	0%	0	0%	0	0%	31	6%	0	0%	34	6%	1	1%	44	8%	1	1%	36	7%	0	0%	17	3%
MN	85	1019	0	0%	0	0%	0	0%	87	9%	0	0%	78	8%	2	2%	111	11%	2	2%	380	37%	0	0%	73	7%
MO	147	2999	0	0%	0	0%	1	1%	287	10%	1	1%	265	9%	1	1%	265	9%	3	2%	1049	35%	0	0%	7	0%
MS	86	1835	0	0%	1	0%	2	2%	1189	65%	0	0%	1277	70%	3	3%	1437	78%	10	12%	1372	75%	0	0%	63	3%
MT	44	147	0	0%	0	0%	16	36%	77	52%	15	34%	68	46%	15	34%	69	47%	2	5%	141	96%	0	0%	3	2%
NC	216	1343	0	0%	0	0%	67	31%	267	20%	0	0%	6	0%	0	0%	16	1%	0	0%	16	1%	0	0%	7	1%
ND	26	127	0	0%	0	0%	25	96%	109	86%	24	92%	111	87%	25	96%	111	87%	0	0%	106	83%	0	0%	1	1%
NE	59	1180	0	0%	1	0%	3	5%	583	49%	0	0%	260	22%	1	2%	282	24%	0	0%	344	29%	0	0%	11	1%
NH	61	186	0	0%	3	2%	0	0%	89	48%	0	0%	89	48%	0	0%	90	48%	2	3%	132	71%	0	0%	38	20%
NI	2	3	0	0%	0	0%	2	100%	3	100%	2	100%	3	100%	2	100%	3	100%	2	100%	1	33%	0	0%	0	0%
NJ	165	2678	0	0%	0	0%	0	0%	2	0%	0	0%	2	0%	0	0%	2	0%	0	0%	1852	69%	0	0%	1200	45%
NM	34	251	0	0%	4	2%	7	21%	213	85%	6	18%	215	86%	13	38%	220	88%	2	6%	221	88%	0	0%	4	2%
NV	10	70	0	0%	0	0%	1	10%	7	10%	0	0%	12	17%	0	0%	9	13%	0	0%	41	59%	0	0%	19	27%

State Breakdown of the Number and Percentage of NPDES Standard Permits with Missing Data in PCS (as of July 2000)

	# of NPDES Ids		Facility Name				Location - Street				Location - City				Location - Zip				Lat/Long				SIC Code			
	NPID		NAM1				RST1				RCTY				RZIP				FLAT/FLON				SIC2			
			Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors	
State	Majors	Minors	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NY	359	1758	0	0%	0	0%	0	0%	23	1%	0	0%	13	1%	0	0%	17	1%	0	0%	39	2%	0	0%	38	2%
OH	287	2565	0	0%	0	0%	134	47%	1607	63%	134	47%	1606	63%	134	47%	1609	63%	12	4%	1378	54%	0	0%	192	7%
OK	91	629	0	0%	0	0%	31	34%	229	36%	86	95%	541	86%	87	96%	582	93%	12	13%	592	94%	0	0%	2	0%
OR	73	775	0	0%	0	0%	6	8%	261	34%	5	7%	255	33%	11	15%	394	51%	13	18%	446	58%	0	0%	9	1%
PA	387	3947	0	0%	0	0%	321	83%	3826	97%	324	84%	3825	97%	324	84%	3830	97%	3	1%	786	20%	1	0%	728	18%
PR	94	189	0	0%	0	0%	0	0%	4	2%	0	0%	4	2%	0	0%	4	2%	1	1%	8	4%	0	0%	6	3%
RI	25	108	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	1%	0	0%	88	81%	0	0%	16	15%
SC	187	506	0	0%	0	0%	1	1%	0	0%	186	99%	503	99%	186	99%	503	99%	66	35%	499	99%	0	0%	0	0%
SD	30	380	0	0%	1	0%	0	0%	27	7%	0	0%	29	8%	0	0%	37	10%	0	0%	41	11%	0	0%	5	1%
TN	156	1321	0	0%	4	0%	132	85%	1058	80%	40	26%	490	37%	129	83%	1003	76%	3	2%	132	10%	2	1%	76	6%
TX	558	2661	0	0%	0	0%	127	23%	866	33%	131	23%	1335	50%	248	44%	1883	71%	10	2%	794	30%	1	0%	266	10%
UT	33	83	0	0%	0	0%	0	0%	2	2%	0	0%	1	1%	0	0%	1	1%	0	0%	7	8%	0	0%	0	0%
VA	141	2835	0	0%	4	0%	130	92%	2489	88%	131	93%	2491	88%	131	93%	2505	88%	22	16%	2507	88%	1	1%	98	3%
VI	6	77	0	0%	0	0%	0	0%	8	10%	0	0%	6	8%	0	0%	7	9%	0	0%	15	19%	0	0%	21	27%
VT	34	108	0	0%	0	0%	33	97%	107	99%	33	97%	107	99%	33	97%	108	100%	0	0%	60	56%	1	3%	16	15%
WA	86	644	0	0%	0	0%	0	0%	224	35%	0	0%	216	34%	5	6%	235	36%	1	1%	257	40%	0	0%	8	1%
WI	133	860	0	0%	0	0%	1	1%	181	21%	1	1%	123	14%	3	2%	831	97%	1	1%	232	27%	1	1%	63	7%
WV	93	1462	0	0%	0	0%	84	90%	1445	99%	64	69%	1370	94%	65	70%	1374	94%	0	0%	699	48%	0	0%	7	0%
WY	26	1137	0	0%	11	1%	17	65%	199	18%	26	100%	1075	95%	26	100%	1131	99%	0	0%	1107	97%	0	0%	25	2%
Nation	6632	52345	0	0%	56	0%	1491	22%	19836	38%	1617	24%	21927	42%	2042	31%	25519	49%	309	5%	22035	42%	11	0%	3533	7%

State Breakdown of the Number and Percentage of NPDES Standard Permits with Missing Data in PCS (as of July 2000)

	# of NPDES Ids		Issued Date				Expired Date				EPA/State Permit				HUC Code				Reach Segment				Design Flow			
	NPID		PTAC where PTEV=P4099				PTAC where PTEV=P5099				EPST				FHBC				FSEG				FLOW			
			Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors	
State	Majors	Minors	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
AK	46	280	0	0%	130	46%	0	0%	130	46%	0	0%	26	9%	27	59%	193	69%	46	100%	280	100%	25	54%	273	98%
AL	208	1390	0	0%	5	0%	0	0%	5	0%	0	0%	6	0%	5	2%	634	46%	72	35%	1198	86%	22	11%	778	56%
AR	109	729	0	0%	28	4%	0	0%	28	4%	0	0%	28	4%	0	0%	13	2%	73	67%	591	81%	0	0%	48	7%
AS	4	3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	4	100%	3	100%	4	100%	3	100%	0	0%	2	67%
AZ	43	144	0	0%	18	13%	0	0%	18	13%	0	0%	5	3%	5	12%	45	31%	16	37%	118	82%	8	19%	47	33%
CA	245	684	1	0%	19	3%	1	0%	19	3%	1	0%	1	0%	24	10%	337	49%	56	23%	435	64%	6	2%	33	5%
CO	102	421	0	0%	80	19%	0	0%	79	19%	0	0%	3	1%	5	5%	184	44%	23	23%	282	67%	35	34%	298	71%
CT	116	128	0	0%	8	6%	0	0%	11	9%	10	9%	42	33%	3	3%	57	45%	11	9%	74	58%	51	44%	124	97%
DC	4	12	0	0%	0	0%	0	0%	0	0%	0	0%	1	8%	0	0%	5	42%	4	100%	12	100%	4	100%	8	67%
DE	24	41	1	4%	0	0%	0	0%	0	0%	0	0%	7	17%	0	0%	6	15%	24	100%	41	100%	16	67%	34	83%
FL	237	350	0	0%	32	9%	0	0%	32	9%	0	0%	0	0%	11	5%	127	36%	40	17%	219	63%	80	34%	120	34%
GA	169	783	0	0%	0	0%	0	0%	0	0%	26	15%	202	26%	8	5%	155	20%	26	15%	272	35%	47	28%	358	46%
GU	8	11	0	0%	2	18%	0	0%	2	18%	0	0%	0	0%	8	100%	11	100%	8	100%	11	100%	0	0%	2	18%
HI	24	39	0	0%	1	3%	0	0%	1	3%	0	0%	1	3%	20	83%	28	72%	24	100%	39	100%	2	8%	28	72%
IA	123	1658	0	0%	89	5%	0	0%	88	5%	0	0%	66	4%	0	0%	103	6%	123	100%	1658	100%	11	9%	693	42%
ID	44	278	0	0%	98	35%	0	0%	98	35%	0	0%	27	10%	0	0%	25	9%	44	100%	278	100%	16	36%	263	95%
IL	268	1787	0	0%	1	0%	0	0%	1	0%	0	0%	0	0%	0	0%	11	1%	268	100%	1787	100%	0	0%	457	26%
IN	174	1180	0	0%	1	0%	0	0%	1	0%	0	0%	6	1%	0	0%	7	1%	162	93%	767	65%	38	22%	114	10%
KS	58	1161	0	0%	180	16%	0	0%	34	3%	0	0%	16	1%	3	5%	544	47%	6	10%	586	50%	5	9%	415	36%
KY	127	1861	0	0%	35	2%	0	0%	35	2%	0	0%	35	2%	7	6%	322	17%	33	26%	1518	82%	10	8%	555	30%
LA	245	3635	2	1%	2344	64%	2	1%	2344	64%	20	8%	2039	56%	4	2%	1645	45%	121	49%	3298	91%	143	58%	3288	90%
MA	146	522	0	0%	242	46%	0	0%	243	47%	1	1%	229	44%	1	1%	170	33%	22	15%	435	83%	46	32%	450	86%
MD	99	565	0	0%	1	0%	0	0%	1	0%	0	0%	18	3%	11	11%	110	19%	99	100%	565	100%	14	14%	152	27%
ME	94	257	0	0%	58	23%	0	0%	58	23%	2	2%	65	25%	3	3%	61	24%	15	16%	148	58%	21	22%	122	47%
MI	181	543	0	0%	1	0%	0	0%	1	0%	1	1%	35	6%	0	0%	10	2%	170	94%	515	95%	5	3%	34	6%
MN	85	1019	0	0%	65	6%	0	0%	65	6%	0	0%	231	23%	0	0%	142	14%	85	100%	1019	100%	1	1%	199	20%
MO	147	2999	1	1%	412	14%	1	1%	412	14%	0	0%	18	1%	5	3%	1504	50%	50	34%	2136	71%	1	1%	172	6%
MS	86	1835	0	0%	109	6%	0	0%	109	6%	3	3%	114	6%	1	1%	284	15%	18	21%	1401	76%	0	0%	271	15%
MT	44	147	0	0%	1	1%	0	0%	0	0%	0	0%	3	2%	2	5%	63	43%	4	9%	94	64%	18	41%	77	52%
NC	216	1343	0	0%	3	0%	0	0%	3	0%	0	0%	7	1%	0	0%	133	10%	25	12%	1026	76%	1	0%	13	1%
ND	26	127	0	0%	11	9%	0	0%	11	9%	0	0%	0	0%	0	0%	63	50%	3	12%	89	70%	10	38%	113	89%
NE	59	1180	0	0%	327	28%	0	0%	327	28%	1	2%	441	37%	0	0%	311	26%	59	100%	1180	100%	0	0%	709	60%
NH	61	186	0	0%	95	51%	0	0%	95	51%	2	3%	97	52%	0	0%	71	38%	10	16%	139	75%	17	28%	145	78%
NI	2	3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%	3	100%	2	100%	3	100%	0	0%	1	33%
NJ	165	2678	0	0%	5	0%	0	0%	5	0%	0	0%	5	0%	0	0%	2041	76%	165	100%	2678	100%	164	99%	2678	100%
NM	34	251	0	0%	117	47%	0	0%	117	47%	1	3%	82	33%	1	3%	173	69%	5	15%	202	80%	7	21%	223	89%
NV	10	70	0	0%	0	0%	0	0%	0	0%	0	0%	5	7%	0	0%	37	53%	2	20%	56	80%	1	10%	38	54%

State Breakdown of the Number and Percentage of NPDES Standard Permits with Missing Data in PCS (as of July 2000)

	# of NPDES Ids		Issued Date				Expired Date				EPA/State Permit				HUC Code				Reach Segment				Design Flow			
	NPID		PTAC where PTEV=P4099				PTAC where PTEV=P5099				EPST				FHBC				FSEG				FLOW			
			Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors		Majors		Minors	
State	Majors	Minors	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NY	359	1758	0	0%	15	1%	0	0%	13	1%	0	0%	21	1%	0	0%	32	2%	359	100%	1758	100%	1	0%	740	42%
OH	287	2565	0	0%	23	1%	0	0%	24	1%	15	5%	1109	43%	12	4%	1374	54%	287	100%	2565	100%	131	46%	2561	100%
OK	91	629	0	0%	92	15%	0	0%	92	15%	9	10%	164	26%	3	3%	262	42%	16	18%	367	58%	30	33%	361	57%
OR	73	775	0	0%	6	1%	0	0%	7	1%	0	0%	0	0%	1	1%	158	20%	73	100%	775	100%	23	32%	767	99%
PA	387	3947	0	0%	19	0%	0	0%	15	0%	4	1%	257	7%	6	2%	1966	50%	387	100%	3947	100%	94	24%	999	25%
PR	94	189	1	1%	39	21%	1	1%	39	21%	0	0%	22	12%	1	1%	46	24%	94	100%	189	100%	6	6%	34	18%
RI	25	108	0	0%	2	2%	0	0%	1	1%	0	0%	46	43%	0	0%	22	20%	3	12%	83	77%	24	96%	108	100%
SC	187	506	1	1%	10	2%	1	1%	10	2%	0	0%	0	0%	31	17%	183	36%	55	29%	310	61%	112	60%	440	87%
SD	30	380	0	0%	9	2%	0	0%	9	2%	0	0%	1	0%	0	0%	20	5%	13	43%	335	88%	7	23%	130	34%
TN	156	1321	1	1%	46	3%	1	1%	46	3%	2	1%	28	2%	5	3%	294	22%	38	24%	1051	80%	37	24%	1073	81%
TX	558	2661	3	1%	410	15%	3	1%	409	15%	5	1%	178	7%	26	5%	1395	52%	115	21%	1794	67%	201	36%	1871	70%
UT	33	83	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	32	39%	6	18%	56	67%	8	24%	57	69%
VA	141	2835	0	0%	96	3%	0	0%	99	3%	7	5%	196	7%	24	17%	1951	69%	141	100%	2835	100%	29	21%	1890	67%
VI	6	77	0	0%	12	16%	0	0%	12	16%	0	0%	4	5%	0	0%	77	100%	6	100%	77	100%	0	0%	34	44%
VT	34	108	0	0%	1	1%	0	0%	1	1%	3	9%	28	26%	0	0%	56	52%	2	6%	57	53%	33	97%	107	99%
WA	86	644	0	0%	97	15%	0	0%	97	15%	0	0%	58	9%	0	0%	114	18%	86	100%	644	100%	37	43%	467	73%
WI	133	860	1	1%	72	8%	1	1%	27	3%	1	1%	116	13%	1	1%	207	24%	133	100%	860	100%	49	37%	442	51%
WV	93	1462	0	0%	92	6%	0	0%	86	6%	0	0%	58	4%	0	0%	447	31%	93	100%	1462	100%	33	35%	986	67%
WY	26	1137	0	0%	73	6%	0	0%	59	5%	0	0%	26	2%	0	0%	821	72%	1	4%	1024	90%	14	54%	1097	96%
Nation	6632	52345	12	0%	5632	11%	11	0%	5419	10%	114	2%	6173	12%	270	4%	19088	36%	3826	58%	45342	87%	1694	26%	27499	53%

State Breakdown of the Number and Percentage of NPDES Standard Permit Outfalls with Missing Data in PCS (as of July 2000)

	# of Pipes		Latitude/Longitude					Accuracy				Method			
				PLAT/PLON				PLLC				PLLM			
			Majors		Minors		Majors		Minors		Majors		Minors		
State	Majors	Minors	#	%	#	%	#	%	#	%	#	%	#	%	
AK	96	287	52	54.2%	284	99.0%	62	64.6%	287	100.0%	52	54.2%	284	99.0%	
AL	954	2317	342	35.8%	1917	82.7%	380	39.8%	1946	84.0%	641	67.2%	2248	97.0%	
AR	312	870	12	3.8%	32	3.7%	214	68.6%	729	83.8%	131	42.0%	263	30.2%	
AS	4	3	4	100.0%	3	100.0%	4	100.0%	3	100.0%	4	100.0%	-1	-33.3%	
AZ	219	149	136	62.1%	79	53.0%	208	95.0%	86	57.7%	155	70.8%	79	53.0%	
CA	602	698	299	49.7%	692	99.1%	440	73.1%	693	99.3%	318	52.8%	692	99.1%	
CO	277	1007	169	61.0%	985	97.8%	169	61.0%	986	97.9%	169	61.0%	986	97.9%	
CT	248	141	74	29.8%	134	95.0%	74	29.8%	134	95.0%	74	29.8%	134	95.0%	
DC	19	40	5	26.3%	39	97.5%	5	26.3%	39	97.5%	5	26.3%	39	97.5%	
DE	72	66	30	41.7%	61	92.4%	31	43.1%	61	92.4%	30	41.7%	61	92.4%	
FL	694	558	625	90.1%	553	99.1%	655	94.4%	557	99.8%	626	90.2%	553	99.1%	
GA	265	930	173	65.3%	774	83.2%	262	98.9%	930	100.0%	261	98.5%	930	100.0%	
GU	8	11	8	100.0%	11	100.0%	8	100.0%	11	100.0%	8	100.0%	3	27.3%	
HI	58	55	21	36.2%	22	40.0%	52	89.7%	55	100.0%	24	41.4%	22	40.0%	
IA	628	2371	291	46.3%	1185	50.0%	291	46.3%	1185	50.0%	628	100.0%	1743	73.5%	
ID	78	302	31	39.7%	286	94.7%	37	47.4%	296	98.0%	31	39.7%	286	94.7%	
IL	1318	4155	236	17.9%	1780	42.8%	238	18.1%	1815	43.7%	1318	100.0%	2837	68.3%	
IN	1248	1674	728	58.3%	803	48.0%	742	59.5%	905	54.1%	941	75.4%	932	55.7%	
JA	0	1	0	0.0%	1	100.0%	0	0.0%	1	100.0%	0	0.0%	1	100.0%	
KS	108	1250	41	38.0%	1242	99.4%	41	38.0%	1242	99.4%	41	38.0%	1242	99.4%	
KY	426	2777	17	4.0%	261	9.4%	61	14.3%	490	17.6%	207	48.6%	2190	78.9%	
LA	1175	4018	672	57.2%	3993	99.4%	676	57.5%	3994	99.4%	684	58.2%	3997	99.5%	
MA	331	731	122	36.9%	604	82.6%	142	42.9%	725	99.2%	127	38.4%	648	88.6%	
MD	275	1049	95	34.5%	1000	95.3%	100	36.4%	1013	96.6%	96	34.9%	1005	95.8%	
ME	181	428	139	76.8%	423	98.8%	154	85.1%	428	100.0%	142	78.5%	424	99.1%	
MI	487	740	225	46.2%	694	93.8%	228	46.8%	696	94.1%	487	100.0%	253	34.2%	
MN	322	1435	159	49.4%	1268	88.4%	208	64.6%	1403	97.8%	322	100.0%	1113	77.6%	
MO	491	3939	245	49.9%	2636	66.9%	245	49.9%	2636	66.9%	246	50.1%	2657	67.5%	
MS	147	2173	92	62.6%	2171	99.9%	92	62.6%	2171	99.9%	92	62.6%	2171	99.9%	
MT	117	250	66	56.4%	235	94.0%	71	60.7%	245	98.0%	71	60.7%	246	98.4%	
MW	0	1	0	0.0%	1	100.0%	0	0.0%	1	100.0%	0	0.0%	1	100.0%	
NC	309	1376	53	17.2%	1372	99.7%	53	17.2%	1372	99.7%	53	17.2%	1372	99.7%	
ND	88	195	41	46.6%	195	100.0%	41	46.6%	195	100.0%	42	47.7%	195	100.0%	
NE	161	1785	117	72.7%	1780	99.7%	117	72.7%	1780	99.7%	161	100.0%	1624	91.0%	
NH	142	203	76	53.5%	201	99.0%	78	54.9%	201	99.0%	76	53.5%	201	99.0%	
NI	2	3	2	100.0%	3	100.0%	2	100.0%	3	100.0%	2	100.0%	1	33.3%	
NJ	290	3188	64	22.1%	2235	70.1%	64	22.1%	2238	70.2%	65	22.4%	2239	70.2%	
NM	167	304	133	79.6%	298	98.0%	133	79.6%	304	100.0%	133	79.6%	304	100.0%	